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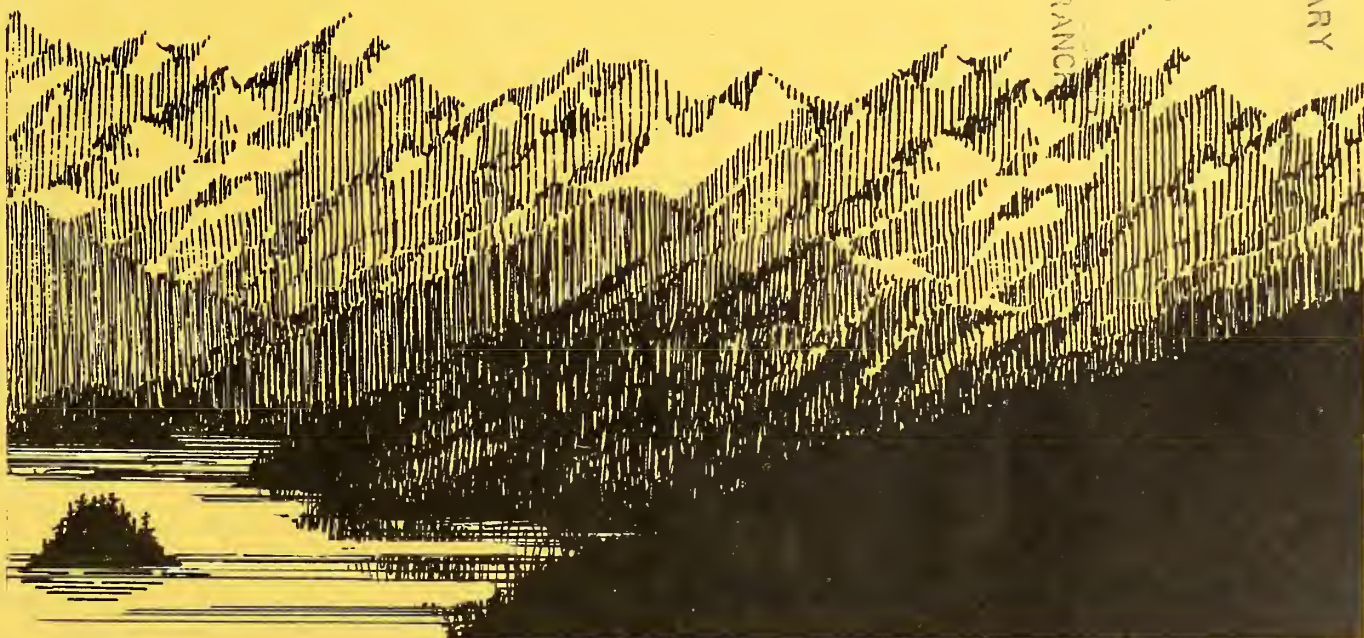
August 1991



# Tongass Land Management Plan Revision

## Supplement to the Draft Environmental Impact Statement

### Summary



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# **Tongass Land Management Plan Revision**

## **Summary of the Supplement to the Draft Environmental Impact Statement**

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## Section One

### Your Part in Forest Planning

#### Why Me?

Once again, we are asking for your help in shaping a revised plan for the Tongass National Forest. Last year we asked for your comments on the draft environmental impact statement (DEIS) for the Forest Plan revision (the revision of the current Tongass Forest Plan, which was originally developed in 1979). Since then, changes brought about by the Tongass Timber Reform Act (signed into law on November 28, 1990) have made it necessary to revise the alternatives we considered last year, as well as some of our analysis. We've also incorporated new information into this analysis, including over 3,500 comments on the DEIS from readers like yourself. A Supplement to the DEIS has been prepared to document these changes, and offer you another opportunity to give us your comments before a Final Revised Forest Plan is prepared.

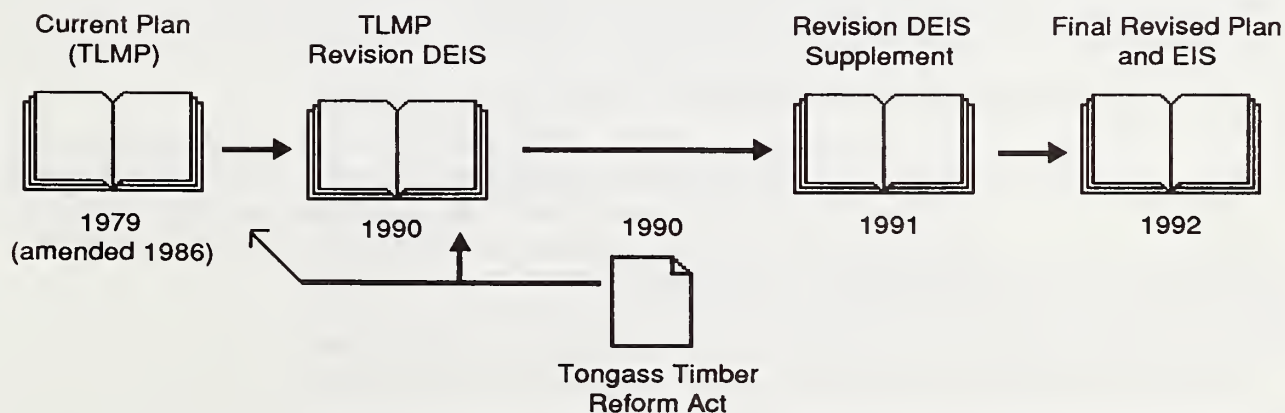
The diagram below portrays the relationship between these documents. The Current Plan was also amended in February 1991 to include provisions of the Tongass Timber Reform Act.

The Tongass National Forest is the nation's largest at 17 million acres. It encompasses the famed "Inside Passage" and is known for its many bald eagles, salmon, and brown bear; old-growth rain forests and glaciers; unparalleled scenery and a rich Native culture. It is also a rich source of the natural resources that most of the small communities of Southeast Alaska depend on. It supports major uses such as tourism, fishing, timber harvest, subsistence, recreation, hunting, and mining. It is not surprising that many people hold a variety of strong views about how the Forest should be managed.

The revised Tongass Plan will direct all land management activities on the Forest. It will identify what land is to be managed for the different uses and how the environment is to be protected so these uses can be maintained.

You can now help us by reviewing and commenting on the contents of the documents and map packet, and through your continuing involvement in the plan revision process.

#### Relationship of the Planning Documents





## Shaping the Plan

This summary of the Supplement to the DEIS presents five feasible ways of managing the Tongass over the next 10 to 15 years. These alternatives were developed to show how the major issues, identified earlier in the planning process, could be resolved. The alternatives are described in this summary.

At this stage the task is to identify the specific mix of land allocations and resource uses which best meets the diverse needs of the many individuals, organizations and agencies using the Tongass National Forest. You can help us by identifying the alternative, or portions of alternatives, that you prefer, and providing any other information that you feel is important in shaping the Plan revision. Your response, and the responses of others, including all who commented on the 1990 DEIS, will be carefully read and used to complete the revised Forest Plan.

## Organization of the Supplement

The summary represents a small segment of the information that has been gathered and analyzed in preparation of the Supplement. You may wish to refer to the full set of documents in your review. The full Supplement, like last year's DEIS, is organized as follows:

### Chapter 1. Purpose and Need

This chapter describes the process, laws and regulations being used to revise the Tongass Plan. It describes the issues that were identified by the public and upon which the Plan Revision is based. Changes since the 1990 DEIS, including the Tongass Timber Reform Act, are also discussed.

### Chapter 2. Alternatives

This chapter discusses how the management options were developed, and describes the five alternatives, including a preferred alternative, in detail. It also examines how each of the alternatives addresses the public issues, and compares the significant environmental effects of the alternatives.

### Chapter 3. Environment and Effects

Chapter 3 describes the specific environment to be affected (for example, fish, minerals, old growth, timber or wildlife), and then discusses the significant effects that each of the alternatives could have on that environment.

The Supplement also includes a glossary, a bibliography, a list of preparers, a mailing list, and an index. Two appendix volumes provide additional information on the identification of issues, the modeling and analysis process, roadless areas, potential Wild and Scenic Rivers, and a host of other background information. A map packet includes maps of the five alternatives, the current Tongass Land Management Plan and existing Transportation System, a map of roadless areas on the Tongass, and maps showing resource information.

New with the Supplement is a separate document, the Proposed Revised Forest Plan. This is a complete version of the revised Forest Plan based on the preferred alternative, and includes, among other things, the management prescriptions for each land use designation (these are explained later on in the Summary), Forest-wide standards and guidelines, implementation schedules and a monitoring plan.



## Section Two

### Forest Planning on the Tongass National Forest

#### The Forest

The Tongass National Forest is the largest in the National Forest System, covering more than eighty percent of Southeast Alaska. It extends approximately 500 miles north to south, and 120 miles east to west at its widest point. On the following page is a map of the Tongass National Forest.

About 65,000 people live in Southeast Alaska, most inhabiting the 33 communities located along some 11,000 miles of meandering shoreline. Most of the area is wild and unpopulated. Only three towns are connected to interior Alaska and Canada by road: Haines and Skagway to the north, and Hyder to the south. The state-owned ferry system serves many of the larger towns along the coast.

Because of its immense size, the Tongass National Forest is divided into three Administrative Areas, each with its own Forest Supervisor: the Chatham Area office is in Sitka, the Stikine Area office is in Petersburg, and the Ketchikan Area Office is in Ketchikan. Ranger District offices are located in Yakutat, Juneau, Hoonah, Sitka, Petersburg, Wrangell, Thorne Bay, Craig, and Ketchikan; National Monument offices are located in Juneau and Ketchikan. The Regional Office, headquarters of the Regional Forester, is also located in Juneau.

#### Public Issues

An extensive public involvement process began in 1987 to identify the aspects of Tongass management that were of greatest interest to residents of Southeast Alaska and others concerned about the Tongass. Some 600 responses were received, and were grouped into ten major public issues. Comments on the 1990 DEIS came from over 3,500 respondents. These provided many differing viewpoints and much new information, however, the ten original issues still encompass the comments received to date, and have remained the same! Those issues are summarized below.

Although the issues themselves haven't changed, some details have changed as a result of the Tongass Timber Reform Act. These changes are discussed.

#### **Scenic Quality - What areas of the Tongass National Forest should be managed to emphasize scenic resources?**

The residents of Southeast Alaska, plus thousands of annual visitors, enjoy the outstanding scenery of the Tongass National Forest. Tourism has become a major industry, similar to commercial fishing and timber harvest in the number of people directly employed.

The challenge is ensuring scenic quality and maintaining opportunities for tourism, given competing timber values.

#### **Recreation - What areas of the Tongass should be managed to emphasize recreation opportunities?**

Outdoor recreation opportunities offered by the Tongass are important to the quality of life of Southeast Alaskans and many visitors. Many people have favorite places where they fish, hunt, beachcomb, hike, or just go to get away. Forest management has the potential to alter some of these recreation places, and either enhance or detract from what people now experience.

The challenge is maintaining high quality recreation opportunities and settings given competing timber values.

Summary

Tongass National Forest Location





## **Fish Habitat - What methods should be used to protect resident and anadromous fish habitat?**

Most of the salmon caught in the waters of Southeast Alaska originate in streams and lakes within the Tongass National Forest. Streamside habitat provides important shelter, food, and spawning ground for the salmon. Changes in streamside habitat can alter a stream's ability to produce fish. The Tongass Timber Reform Act has mandated a 100-foot buffer, within which commercial timber harvest is not allowed, for the Forest's important fish streams.

The challenge is ensuring the long-term productivity of riparian ecosystems for commercial, sport and subsistence fish resources, along with other uses including timber harvesting.

## **Wildlife Habitat - What amount of old-growth and undeveloped habitat should be managed for the protection of wildlife?**

The Tongass National Forest supports a wide variety of wildlife species, including vast colonies of seabirds, many marine mammals, and the largest populations of brown bears and bald eagles in the world. Alaskans, visitors and subsistence users engage in sport hunting of moose, brown and black bears, mountain goat, deer, and waterfowl. There is a growing demand for opportunities to watch and photograph wildlife. Many species of wildlife are associated with old-growth forests; but old-growth forests also contain much of the high-value timber resource.

The challenge is managing forested habitats for competing wildlife and timber uses.



### **Subsistence - What should the Forest Service do to continue providing subsistence opportunities?**

Some Southeast Alaska residents supplement their incomes by subsistence hunting, fishing, trapping, and gathering of other natural resources of the Tongass. Others, especially within the Native population, rely on subsistence not only for food, but as a lifestyle that preserves their customs and traditions. The primary concerns of subsistence users are abundance of the resources, and access to the resources. Abundance is tied in part to the existence of old-growth forests. Access is a mixed issue: some users like new access, while others do not like the increased competition for the resources that may result from easier access.

The challenge is providing for subsistence use while managing for other multiple resource uses.

### **Timber Harvest - What areas of the Tongass should be managed to emphasize timber harvest?**

In the 1950's, two long-term timber contracts were established in order to promote stable, year-round employment in Southeast Alaska. To help ensure a supply of timber to these and other contractors, the Alaska National Interest Lands Conservation Act of 1980 provided for the availability of 4.5 billion board feet of timber each decade. This requirement was recently removed by the Tongass Timber Reform Act (1990), but the Tongass is still by law to "seek to provide a supply of timber" that meets market demand.

Considering different public attitudes, and the economic needs of Southeast Alaska's communities, there are four challenges:

1. Where should timber harvest be allowed;
2. Which lands should be identified as suitable for timber management;
3. What is an appropriate, sustainable level of harvest, given other resource needs and uses; and,
4. What is the relationship of the National Forest timber supply to timber employment in local communities?

### **Roads - What road system should be developed for the Tongass National Forest?**

The land transportation system in Southeast Alaska has evolved almost entirely from the need to access areas for timber harvest. Roads also provide access for recreation, hunting, and subsistence uses. On the other hand, roads can adversely affect scenic quality, wildlife habitat, unroaded recreation, and other aspects of a natural environment.

The challenge is determining where to extend the road system while maintaining the remoteness characteristic of Southeast Alaska.

### **Minerals - What areas and accessibility should be emphasized for the exploration, development and production of mineral resources?**

The Tongass contains substantial mineral resources, from precious metals to minerals for industrial use. Mining activities have occurred for over one hundred years, and some mines are being reopened as mineral prices rise. New and renewed interest in mining could employ many people in Southeast Alaska. On the other hand, mineral development may change the character of the natural environment.

The challenge is resolving the conflict between society's need for non-renewable mineral resources and protection of the environment.



### **Roadless Areas - What areas and what amount of roadless lands should be retained for unroaded management?**

Approximately 5.4 million acres were added to the National Wilderness Preservation System on the Tongass in 1980 by the Alaska National Interest Lands Conservation Act. The Tongass Timber Reform Act of 1990 added another 299,696 acres to the Wilderness System, and also designated 727,765 acres in a permanent "roadless" category (Land Use Designation II).

Some people would still like to see additional land set aside as Wilderness, or in other designations that would maintain roadless values; however, placing land in Wilderness or roadless status can preclude the development of surface and subsurface resources. Since Congress considered different Wilderness recommendations in deliberations for the Tongass Timber Reform Act, no additional recommended Wilderness is being considered by the Forest Service for the Tongass Plan revision. However, several other land use designations are available for recognizing and protecting roadless values.

The challenge is determining the amount of roadless area to maintain for its ecologic, wildlife and recreation values, while also providing opportunities for mineral and timber resource developments important to Southeast Alaska's economy.

### **Local Economy - What ways should National Forest lands be managed to provide for the local lifestyles of Southeast Alaska communities?**

Employment and income generated by the government sector, timber, fishing, mining, and tourism industries is vital to the social and economic well-being of communities in Southeast. All of these types of employment are founded on the development or enjoyment of the resources of the Tongass National Forest. The positive increase in the development of one industry or lifestyle may negatively affect another industry or lifestyle. For example, maintaining current employment in the timber sector will require the development of more areas of the Forest, and that development may impact other resource activities.

The challenge is ensuring an adequate supply of resource opportunities that contribute to local community stability.

**Wild, Scenic and Recreation Rivers.** Since the public issues were originally identified in 1988, possible additions to the National Wild and Scenic Rivers System have become important nationally and to some people in Southeast Alaska. On the Tongass, 112 rivers have been identified as possessing outstandingly remarkable values, and are being considered for suitability by alternative.

### **From Current Plan to Revision**

Once the public issues were identified, it became clear that in order to address these issues, some changes were needed in the current Tongass Land Management Plan. These changes include: updating the current Plan's goals and objectives; developing more land use designations, with more detailed management prescriptions, to replace the existing land use designations (LUD's); updating and expanding on the existing standards and guidelines (which specify how projects and activities are to be carried out); reassessing the amount of suitable lands for timber management and the amount of timber to make available; and updating the Plan's monitoring and evaluation requirements.

## From Four LUD's to Twenty-Three

Land management planning may be compared to city, county or borough zoning. Just as areas in your community are zoned for different uses (such as commercial, industrial or residential zones), the forest is also “zoned” to allow, or not allow, various uses and activities. Land management zoning is done through the use of land use designations. The current Tongass Plan has four basic land use designations (LUD's), with several variations, to direct management of the Forest. A variation of LUD II, “LUD II-Legislated,” was added in a 1991 amendment as a result of the Tongass Timber Reform Act. A map of the amended Tongass Land Management Plan in the map packet (“no action” alternative) shows and describes where these LUD's are applied. The alternatives presented in this Summary use 23 land use designations rather than four.

The 23 land use designations are described briefly below. Each alternative map specifies where these would be applied. The designations are divided into four groups: Wilderness, Natural Setting, Moderate Development and Intensive Development. These groups have been made based on the potential for environmental effects within each LUD, and will be used later in the Summary for comparing alternatives.

### Wilderness LUD Group

- Wilderness - Manage for the preservation of areas essentially unaffected by human use that provide outstanding opportunities for solitude, primitive recreation, and scientific and educational uses. Roads are not permitted and use of mechanical transport and motorized equipment is limited.
- Wilderness National Monument - Manage for the Wilderness portions of National Monuments that provide outstanding opportunities for solitude and primitive recreation and to protect objects of ecological, cultural, geological, historical, prehistorical, and scientific interest. Roads are not permitted and use of mechanical transport and motorized equipment is limited.
- Nonwilderness National Monument - Manage the nonwilderness portions of National Monuments to facilitate development of significant mineral resources to assure mining activities are compatible, to the maximum extent feasible, with the purposes for which the Monument was established.

### Natural Setting LUD Group

- Research Natural Area - Manage areas for research and education and/or to maintain natural diversity on National Forest System lands. Current natural conditions are maintained insofar as possible. No timber harvest will occur.
- Other Area - Emphasize stewardship and protection of lands for which there is no other specific land use emphasis. Timber harvest generally does not occur and roads are normally present only when necessary to access adjacent land use designations.
- Beach Fringe and Estuary - Manage for natural beach fringe and estuary habitats, including windfirm old-growth conifer stands, cliffs, and beaches above the mean high-tide line. Timber harvesting is limited to salvage after catastrophic events. Roads associated with log transfer facilities may be located within the area.



- **Primitive Recreation** - Provide recreation opportunities and experiences outside Wilderness in unmodified natural environments where interaction with other visitors is infrequent, and the opportunity for independence and closeness to nature is high. Timber harvesting is limited to insect and disease control. Roads are absent.
- **Enacted Municipal Watersheds** - Manage enacted municipal watersheds to meet State Water Quality Standards for domestic use. No timber harvesting will be scheduled, but insect-infested and diseased timber may be removed under conditions which safeguard the quantity and quality of water. Roads are limited to administer the municipal watersheds.
- **Old-Growth Habitat** - Maintain old-growth conifer habitat in its natural condition to favor old-growth associated fish and wildlife resources. No timber harvesting will be scheduled and roads will be located outside the area when possible.
- **Semi-primitive Recreation** - Provide motorized and non-motorized recreation opportunities in natural and natural-appearing environments where interaction with others is low and the opportunity for independence and self-reliance is moderate to high. When present, roads are few and used primarily to expand and improve access to recreation opportunities or to permit access to other parts of the Forest and other ownerships. Timber harvest is limited to salvage of catastrophic events or beach log recovery.
- **Land Use Designation II** - Manage these Congressionally designated areas in a roadless state to retain the wildland character. Wildlife and fish habitat improvement and primitive recreational facility development is permitted. Timber harvesting is limited to insect and disease control. Roads will not be built except to serve mining and other authorized activities and vital Forest transportation system linkages.
- **Special Interest Areas** - Provide for the protection and interpretation of selected areas with unique archeological, historical, recreational, scenic, geological, botanical, zoological or paleontological features. No timber harvest is scheduled. Roads will not be permitted unless compatible with management objectives.
- **Wild Rivers** - Maintain and improve the outstandingly remarkable values of river segments which qualify the river to be classified a Wild River. Shorelines are primitive and undeveloped. Timber harvesting is limited to insect and disease control. Roads are generally not present. Access is by trail, airplane or boat.
- **Scenic Rivers** - Maintain and improve the outstandingly remarkable values of river segments which qualify the river to be classified a Scenic River. Shorelines are largely undeveloped but may be accessible in places by roads. Timber harvesting is limited by the ability of the landscape to visually absorb the activity. Roads will be designed to be compatible with the landscape.
- **Recreation Rivers** - Maintain and improve the outstandingly remarkable values of river segments which qualify the river to be classified a Recreation River. Shoreline development may occur and the river may be readily accessible by road. Timber harvesting is allowed with priority to maintain existing and proposed recreation sites within the corridor. Roads are permitted.

## Moderate Development LUD Group

- **Experimental Forests** - Manage to provide a variety of long-term opportunities for Forest research and demonstration areas. Timber harvesting will occur only for these purposes. Roads will be developed to facilitate ongoing research.
- **Scenic Viewshed** - Management activities are not visually apparent to the casual observer in the near distance from important land or marine travel routes, recreation sites, popular bays and anchorages. In the middle to background distance, activities are subordinate to the landscape character of the area. Timber harvest is allowed.
- **Modified Landscape** - Manage for a variety of uses. Management activities are subordinate to the visual character as seen in the near distance. In the middle to background distance, activities may dominate but are designed to be compatible with features found in the characteristic landscape. Timber harvest is allowed.
- **Fish Habitat and Water Quality Requirements** - Meet riparian management requirements of no serious and adverse effects to fish habitat and water quality. Timber harvesting will be allowed where not in conflict with protecting riparian-associated resources. Roads will be located outside the area to the extent practicable.
- **Stream and Lake Protection** - Maintain or improve fish and other riparian-associated resources. Timber harvesting is allowed where not in conflict with protecting riparian-associated resources. Roads will be located outside the area to the extent practicable.

## Intensive Development LUD Group

- **Timber Production** - Manage the area to maintain and promote industrial wood production. These lands will be managed to advance conditions favorable for the timber resource and for maximum long-term timber production. Roads are permitted.
- **Minerals** - Encourage the exploration and development of mineral resources in areas having high potential for mineral commodities including nationally-designated strategic and critical minerals. Until mineral activities are initiated, the area will be managed according to the underlying land use designation.
- **Transportation and Utility Systems** - Emphasize existing and potential major public transportation and utility systems. Until transportation or utility systems are constructed, the area will be managed according to the underlying land use designation.

## Alternative Ways to Manage the Forest

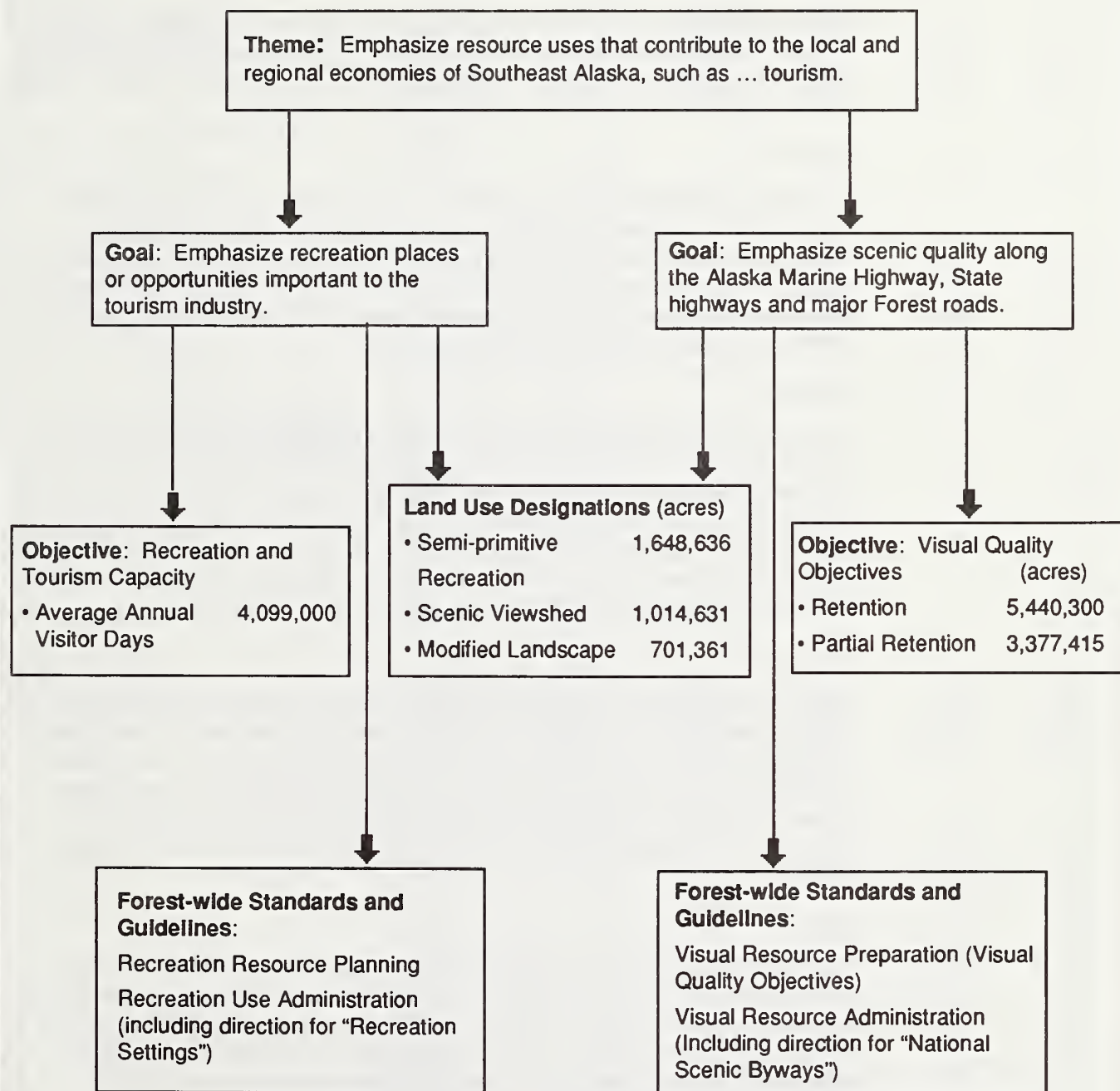
This section describes alternative ways that the Forest might be managed. The National Forest Management Act requires that each alternative be implementable, address major public issues, and be cost-effective. It also requires that one alternative continue the current management direction into the future (this is Alternative C).

### How the Alternatives Are Structured

Each alternative in the Supplement is presented in the same format. Each has a theme, goals, objectives (resource outputs and activities), and land use designations. Each land use designation (as described previously) has a management prescription that includes practices and standards and guidelines.

In order to understand how these work together to guide land use decisions, let's look at a specific example. One aspect of the theme of Alternative B is to emphasize tourism to help support the local economy. The diagram on the following page shows how this theme is used in setting goals and objectives, allocating land use designations, and applying standards and guidelines.

## Relationship of the Different Components of a Forest Plan Alternative<sup>1</sup>



<sup>1</sup> Based on selected portions of Alternative B related to tourism.



### **The Alternatives**

The five alternatives are now described briefly. The theme for each alternative is given, followed by two tables. Table 1 shows the objectives of the alternatives (in terms of resource outputs, activities and costs), and Table 2 displays the acres allocated to each land use designation.

#### *Alternative A*

The theme of this alternative is to emphasize high-quality fish and wildlife habitat, unroaded areas, wild, scenic, and recreation rivers, scenic quality, subsistence use, and a wide range of recreation and tourism opportunities in a natural setting. Timber harvest and mining may occur at levels compatible with the non-market emphasis of this alternative.

#### *Alternative B*

The theme of this alternative is to emphasize resource uses that contribute to the local and regional economies of Southeast Alaska, such as timber harvesting, commercial fishing, mining, recreation, and tourism. Non-market values such as wildlife habitat, visual quality, roadless area opportunities, and wild, scenic, and recreation rivers will be emphasized in selected areas. Opportunities for local residents to pursue traditional lifestyles, including subsistence use and recreation, will also be emphasized.

#### *Alternative C*

The theme of this alternative is to continue the land use designations (as approximated by the new LUD's), resource outputs and activities, and management direction of the current Tongass Land Management Plan (as approved in 1979, amended in 1986, and amended again in 1991 as a result of the Tongass Timber Reform Act of 1990). Timber harvest levels that contribute to maintaining local employment are emphasized, along with maintaining the variety of recreation opportunities and scenic quality currently available. Opportunities for local residents to pursue traditional lifestyles, including subsistence use and recreation, will continue.

#### *Alternative D*

The theme of this alternative is to provide an economic timber supply from public lands to meet predicted demand and the existing mill capacity in Southeast Alaska. Management of other resources will be done in an efficient manner consistent with the emphasis on timber supply, and while meeting environmental standards. Some areas with low timber volumes will be managed for recreation, visual quality and other non-commodity values. Areas adjacent to communities will be managed to provide for recreation and related traditional uses, including subsistence.

#### *Alternative P*

The theme of this alternative is to enhance the balanced use of resources of the forest and provide a public timber supply to maintain the Southeast Alaska timber industry. Many of the most important wildlife habitats, recreation and subsistence opportunities and scenic values will be maintained in a natural setting. Minerals development is encouraged in selected areas. Resources that will contribute to the local and regional economies of Southeast Alaska are emphasized. This is the Forest Service's preferred alternative.

Table 1

**Alternative comparisons: Resource objectives for the first decade<sup>1</sup>**

Resource Output, Activity, Effect or Cost	Unit of Measure <sup>2</sup>	A	B	Alternative C	D	P
<i>Recreation Capacity (Recreation Opportunity Spectrum Classes)<sup>3</sup></i>						
Primitive, and Semi-primitive Non-motorized	MRVD's	1,394	1,352	964	1,130	1,012
Semi-primitive Motorized	MRVD's	1,296	1,291	978	1,072	1,003
Roaded Natural and Roaded Modified	MRVD's	1,341	1,456	2,779	2,240	2,657
<b>Total</b>	<b>MRVD's</b>	<b>4,031</b>	<b>4,099</b>	<b>4,721</b>	<b>4,442</b>	<b>4,672</b>
<i>Trail Construction/Reconstruction<sup>3</sup></i>	Miles	7	7	7	7	7
<i>Developed Site Construction/ Reconstruction<sup>3</sup></i>	PAOT's	137	137	137	137	137
<i>Visual Quality Objectives</i>						
Retention	M Acres	6,097	5,440	5,025	2,891	4,611
Partial Retention	M Acres	3,497	3,377	2,210	3,720	3,092
Modification	M Acres	818	599	1,009	661	1,141
Maximum Modification	M Acres	850	1,861	3,073	4,025	2,446
<i>Roadless Lands Remaining</i>	M Acres	15,014	14,943	14,738	14,729	14,802
<i>Wild and Scenic River Recommendations</i>						
Wild	Miles	1,074	625	0	360	260
Scenic	Miles	155	148	0	23	88
Recreational	Miles	154	145	0	87	85
<i>Research Natural Areas</i>	Number	24	23	20	20	23
<i>Special Interest Areas</i>	Number	20	20	7	9	20
<i>Experimental Forests</i>	Number	1	1	2	1	1
<i>Hunting and Fishing</i>						
Brown Bear Hunting	Hr. Days	900	900	900	900	900
Black Bear Hunting	Hr. Days	2,600	2,600	2,600	2,600	2,600
Deer Hunting	Hr. Days	45,296	45,296	45,296	45,296	45,296
Sport Fishing Use	M WFUD's	175	175	175	175	175
<i>Wildlife Habitat Capability (Percent of 1954 Capability)</i>						
Deer	Percent	90	90	88	87	89
Brown Bear	Percent	98	97	96	96	96
Black Bear	Percent	97	97	96	97	97
Mountain Goat	Percent	99	99	99	99	99
Marten	Percent	92	92	90	90	90
Red Squirrel	Percent	97	97	95	95	95
Brown Creeper	Percent	59	59	57	59	59
Red-breasted Sapsucker	Percent	94	93	90	91	90
Hairy Woodpecker	Percent	83	82	80	79	80
Bald Eagle (Nesting)	Percent	92	92	92	84	92
Wolf	Percent	90	90	88	88	89
River Otter	Percent	93	93	93	83	93
Vancouver Canada Goose	Percent	94	93	91	91	91
<i>Allowable Sale Quantity<sup>3</sup></i>						
	MMBF	298	343	451	472	418
	MMCF	72	82	108	112	100

# Summary

Table 1 (continued)

Resource Output, Activity, Effect or Cost	Unit of Measure <sup>2</sup>	A	B	Alternative C	D	P
<i>Precommercial Thinning</i> <sup>3</sup>	Acres	5,750	6,550	8,450	8,600	7,800
<i>Productive Old Growth Retained at End of Decade: (Percent of 1954 Acres)</i>						
Strata A	Percent	99	99	99	99	99
Strata B	Percent	97	97	95	95	95
Strata C	Percent	58	57	57	56	58
Strata D	Percent	56	57	54	55	54
Total	Percent	91	91	90	90	91
<i>Road Construction</i> <sup>3</sup>	Miles	139	161	225	228	205
<i>Suitable Lands Scheduled for Timber Harvest (all decades)</i>	M Acres	1,173	1,360	1,732	1,818	1,649
<i>Timber Harvest by Method</i> <sup>3</sup>						
Clearcut	Acres	13,100	16,900	17,200	17,200	15,600
Tree Selection	Acres	400	1,900	700	1,600	300
<i>Fisheries Improvement Projects</i> <sup>3</sup>						
Projects	Number	25	25	25	25	25
Pounds of Fish (average annual)	MM lbs.	4.7	4.7	4.7	4.7	4.7
Pounds of Fish (at full production)	MM lbs.	19.9	19.9	19.9	19.9	19.9
<i>Wildlife Improvement Projects</i>						
Non-structural	Acres	13,800	13,800	13,800	13,800	13,800
Structural	Number	385	385	385	385	385
<i>Total Forest Budget</i> <sup>3</sup>	MM \$	98.5	101.6	97.7	109.5	106.6
<i>Payments to State</i> <sup>3</sup>	MM \$	14.1	15.3	20.6	21.3	18.9
<i>Employment</i> <sup>3</sup>						
Commercial Fish	Jobs	4,925	4,925	4,925	4,925	4,925
Timber Harvest	Jobs	3,075	3,575	4,700	4,925	4,350
Recreation/Tourism	Jobs	2,925	2,925	2,525	2,650	2,550
Mining and Mineral Development	Jobs	1,100	1,100	1,100	1,100	1,100
Total <sup>4</sup>	Jobs	15,225	15,725	16,450	16,800	16,125
<i>Income</i> <sup>3</sup>						
Commercial Fish	MM \$	161.6	161.6	161.6	161.6	161.6
Timber Harvest	MM \$	119.9	138.3	181.8	190.6	169.3
Recreation/Tourism	MM \$	78.9	78.9	68.1	71.5	68.8
Mining and Mineral Development	MM \$	56.7	56.7	56.7	56.7	56.7
Total <sup>4</sup>	MM \$	516.6	535.0	567.7	579.9	555.9

<sup>1</sup> Figures are in average annual amounts where noted.

<sup>2</sup> The abbreviations mean: M = thousands; MM = millions; RVD = recreation visitor day; PAOT = persons at one time; WFUD = wildlife and fish user day; MMBF = million board feet; MMCF = million cubic feet; Hr. = Hunter.

<sup>3</sup> Average annual.

<sup>4</sup> The totals include other sectors.



Table 2

**Land Use Designation Acres by Alternative**

Land Use Designation	A	B	C	D	P
Wilderness	2,672,603	2,672,603	2,672,603	2,672,603	2,672,603
Wilderness National Monument	3,099,048	3,099,048	3,099,048	3,099,048	3,099,048
Nonwilderness National Monument	159,372	159,372	159,372	159,372	159,372
Research Natural Area	53,356	52,895	37,697	27,646	37,777
Special Interest Area	121,666	141,757	7,893	19,885	123,912
Other Area	33,035	35,636	0	43,455	133,806
Primitive Recreation	3,975,046	4,029,974	3,132,379	1,963,480	2,847,634
Enacted Municipal Watershed	9,773	9,773	9,773	9,773	9,773
Old-Growth Habitat	712,159	17,372	367,421	17,236	246,765
Semi-primitive Recreation	1,555,084	1,648,636	557,171	2,672,875	1,265,062
Land Use Designation II	727,765	727,765	727,765	727,765	727,765
Wild, Scenic and Recreation River	337,777	202,531	0	52,225	103,309
Experimental Forest	11,872	10,812	17,259	10,812	10,812
Scenic Viewshed	916,472	1,014,631	680,081	238,718	909,294
Modified Landscape	1,180,098	701,361	1,324,295	561,439	1,299,542
Timber Production	821,069	1,842,686	3,148,599	4,148,845	2,480,327
Minerals	0	130,200	0	338,300	185,500
Beach Fringe and Estuary	288,354	232,327	449,558	0	320,278
Stream and Lake Protection	322,709	398,079	606,344	0	550,179
Fish Habitat and Water Quality Requirements	0	0	0	572,081	0



# Summary

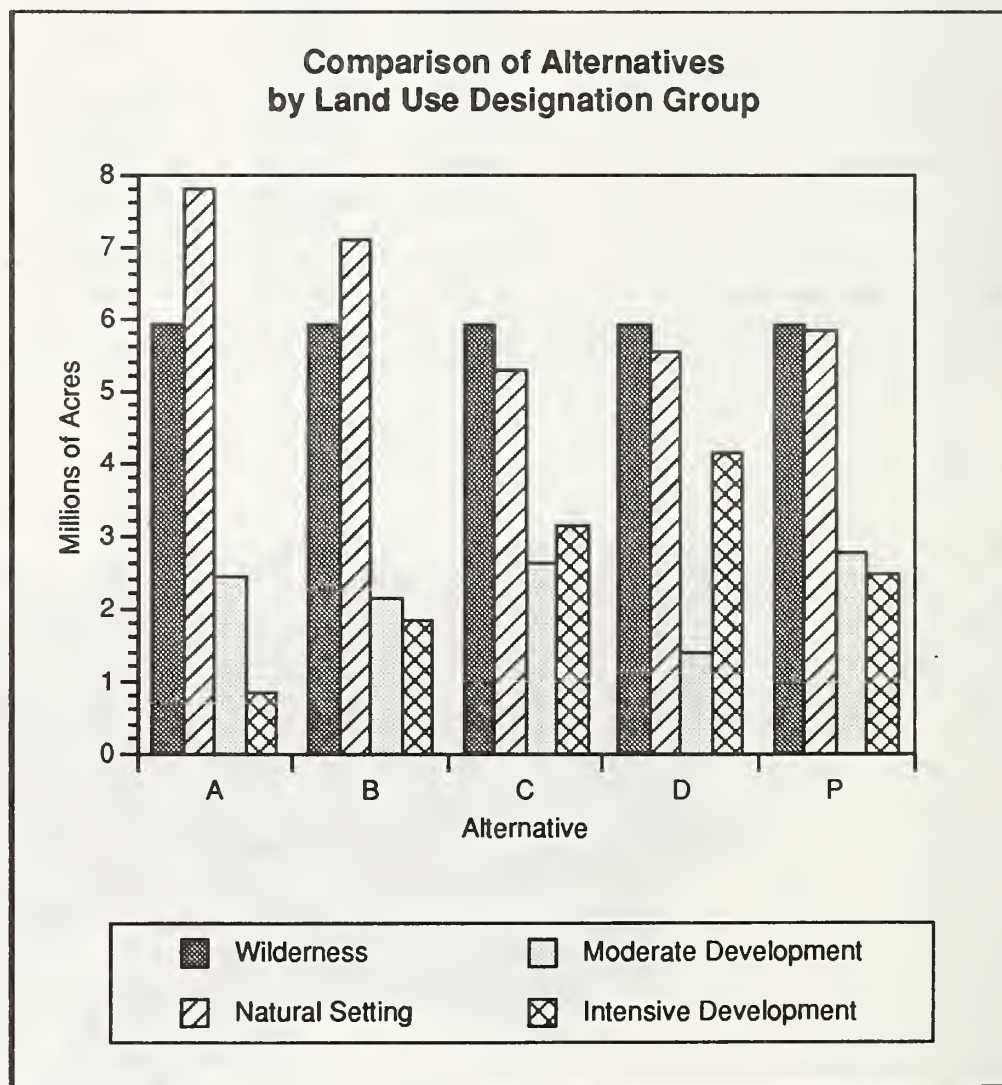
## Comparison of Alternatives

This section compares the five alternatives. The information presented here is intended to highlight the major similarities and differences among the alternatives, and to show how they address the public issues.

### Overall Comparisons

Some of the key comparisons discussed in the remainder of this section have just been displayed in Tables 1 and 2. Take a moment to review these tables; they will help your understanding of the remainder of this section. Figure 1 below compares the alternatives by the amount of land allocated to each of the four land use designation groups previously discussed. On a Forest-wide basis, all the alternatives assign the majority of Tongass National Forest acres to land use designations which maintain the natural environment.

Figure 1





### Scenic Quality

Land use designations (LUD's) in the Wilderness and Natural Setting groups do not generally allow land altering activities or non-natural developments. Exceptions include fish habitat improvements and salvage logging under some LUD's. Lands managed under the LUD's in these groups would have no reductions in visual quality.

Two Moderate Development group LUD's, Scenic Viewshed and Modified Landscape, were specifically designed to address visual resource concerns. The management prescriptions for these LUD's allow for moderate amounts of timber harvest and other activities that change the natural setting, but require modifications of those activities to meet visual objectives. They may be applied to areas such as those seen from the Alaska Marine Highway, or within or adjacent to recreation places, where visual quality and forest products are both important. Lands managed under the land use designations in the Moderate Development group could have slight to moderate reductions in visual quality.

Table 3 ranks alternatives based on visual quality emphasis and the potential to maintain the natural appearance of the Forest.

Table 3

#### Alternative Comparisons: Visual Quality Emphasis<sup>1</sup>

Greatest Emphasis ←————→ Least Emphasis				
A	B	P	C	D

<sup>1</sup> Total acres in the Wilderness, Natural Setting and Moderate Development Land Use Designation groups

### Recreation

The land use designations offer a wide variety of opportunities and settings for recreation. Those in the Wilderness and Natural Setting groups primarily offer primitive and semi-primitive opportunities in natural, unroaded settings, although some forms of traditional, motorized access are allowed (mainly by air or water). LUD's in the Moderate and Intensive Development groups offer more modified settings where access, often by road, is easier.

Not all the land area within any LUD is actually used for recreation purposes, primarily due to the difficulty of access and other geographic restrictions (steep forested slopes, icefields, etc.). The analysis of Tongass National Forest recreation use centers on identified "recreation places" where use occurs, and on the different kinds of settings for recreation, identified through the recreation opportunity spectrum (ROS) system. Opportunities under the different ROS classes are used to compare the alternatives for recreation.

Table 4 displays ROS capacity (in recreation visitor days) by alternative. In general, alternatives with relatively high capacity for primitive and semi-primitive types of recreation (Alternatives A and B) have a lower capacity for roaded types (although some roads may be present within some semi-primitive areas), and vice-versa (Alternatives C, P and D). Alternatives C and P have the highest total recreation capacity.

Boat-accessible recreation opportunities associated with marine settings (particularly in semi-primitive motorized areas) are at or near capacity now. Demand for this type of recreation is expected to exceed the Forest's capacity by the end of the first decade in all alternatives. The capacity for primitive and road-accessible recreation will exceed the demand in all alternatives.

Table 4

## Alternative Comparisons: Recreation Emphasis<sup>1</sup>

Alternative	Annual Recreation Visitor Days		Total ROS
	Primitive and Semi-Primitive ROS	Roaded Natural and Roaded Modified ROS	
A	2,690,000	1,341,000	4,031,000
B	2,643,000	1,456,000	4,099,000
C	1,942,000	2,779,000	4,721,000
D	2,202,000	2,240,000	4,442,000
P	2,075,000	2,657,000	4,672,000

<sup>1</sup> Based on estimated annual recreation visitor days (RVD's) by Recreation Opportunity Spectrum (ROS) class at the end of the first decade.

### Fish Habitat

With the application of the fisheries protection requirements of the Tongass Timber Reform Act, no measurable effects on fisheries were identified as a result of implementing any of the alternatives. In addition, all of the alternatives will provide for habitat improvement projects which will lead to increases in future fish production.

### Wildlife Habitat

All land use designations within the Wilderness and Natural Setting groups will protect and maintain the natural environments for wildlife species of the Tongass.

Since wildlife-associated old growth is the most important habitat type of the Tongass, and the type most subject to change by resource activities, the total amount of productive old growth (currently 5.05 of the 8.64 million acres of old-growth forest), and the high-volume component of old growth, are good indicators to use in comparing alternatives. Table 5 shows the percentage, by alternative, of the amount of old-growth habitat remaining after 10, 50 and 150 years of management. This table and Table 2 show that Alternatives A and B maintain the highest amounts of old growth associated wildlife habitat using either indicator. Alternatives C and D maintain the least amounts of old-growth habitat, having the highest levels of intensive timber management.



Table 5

**Alternative Comparisons: Old-Growth Habitat<sup>1</sup>**

Alt.	Total Productive Old-Growth Habitat			High-Volume Old-Growth Habitat		
	10 Years	50 Years	150 Years	10 Years	50 Years	150 Years
A	91%	82%	77%	58%	51%	47%
B	91%	81%	74%	57%	49%	44%
C	90%	77%	68%	57%	45%	38%
D	90%	76%	67%	56%	44%	38%
P	91%	78%	70%	57%	46%	40%

<sup>1</sup> Percent of old-growth habitat remaining after 10, 50 and 150 years. Total Productive Old Growth Habitat is based on 5,438,547 acres in 1954 (100%) and High-Volume Old Growth of 919,661 acres in 1954 (100%). In 1990, there was 93 percent of Productive Old Growth and 61 percent of High-Volume Old Growth remaining. (High-volume old growth is that portion of the old growth in Strata C and D, as discussed in Chapter 3.)

**Subsistence**

Subsistence was analyzed by looking at three factors: access, the abundance and distribution of fish and wildlife, and competition. In general, although local variations are important, alternatives that best maintain or preserve the natural environment also maintain the most subsistence opportunities. No significant restrictions on access to subsistence resources are anticipated under any of the alternatives. In terms of both abundance and distribution, and competition, all alternatives, if all permitted projects are fully implemented, have the potential to affect the subsistence uses of deer, brown bear, and furbearers. In particular, increased competition from rural and non-rural subsistence users could lead to a significant restriction on subsistence resources for portions of Chichagof, Baranof, and Prince of Wales Islands.

**Timber Harvest**

Three land use designations, Timber Production, Modified Landscape, and Scenic Viewshed, are used in the alternatives for planned and scheduled (that is, excluding salvage logging) timber harvest. The "riparian" LUD's, Stream and Lake Protection, and Fish Habitat and Water Quality Requirements, also allow scheduled timber harvest (on some Class II and Class III streams). (A small percentage of lands within the Scenic River and Recreation River LUD's are also scheduled for harvest in some alternatives.) Within those areas, timber harvest will only occur on lands suitable and scheduled for timber harvest. Table 6 lists the alternatives in order of the amount of productive timber land available for timber harvest.



Table 6

**Alternative Comparisons: Available and Suitable Timberlands<sup>1</sup>**

Alternative	Productive Forest Lands	
	Suitable Available	Suitable Scheduled
D	1,989,000	1,818,400
C	1,940,000	1,732,400
P	1,848,000	1,601,000
B	1,457,000	1,360,000
A	1,261,000	1,173,000

<sup>1</sup> Ranked by total available acres.

Forest-wide there are 2.56 million acres of available (that is, outside of areas that are Congressionally or Administratively closed to timber harvest) and suitable timber lands: the most actually available under any alternative is 1.99 million (Alternative D). The suitable scheduled lands (those actually scheduled for timber harvest to meet an alternative's objectives) are somewhat less than this, ranging from 1.82 million acres in Alternative D down to 1.17 million acres in Alternative A. Forest-wide, less than 12 percent of the Tongass National Forest would be scheduled for timber harvest in any alternative.

The level of timber harvest (the allowable sale quantity) in the alternatives gives the same ranking as the available forest lands. This is shown in Table 7 for the first decade. The average rate of harvest forest-wide by alternative, based on the average annual allowable sale quantity (also first decade), is also shown in Table 7. For each alternative, 12 to 15 percent of the Allowable Sale Quantity (ASQ) is in areas that would require long-span skyline (Strata A areas only) or helicopter harvest methods. (These are termed areas of difficult or isolated "operability".) Also, about five to eight percent of the ASQ comes from National Forest lands that are likely to be conveyed to either the State of Alaska or Native Corporations in the future.

Table 7

**Alternative Comparisons: Amount and Rate of Timber Harvest<sup>1</sup>**

Alternative	First-Decade Average	
	Annual Allowable Sale Quantity (MMBF) <sup>2</sup>	Annual Rate of Timber Harvest (Acres)
D	472	18,800
C	451	17,900
P	418	15,900
B	343	18,800
A	298	13,500

<sup>1</sup> Ranked by allowable sale quantity and rate of harvest.<sup>2</sup> MMBF = million board feet.



## Roads

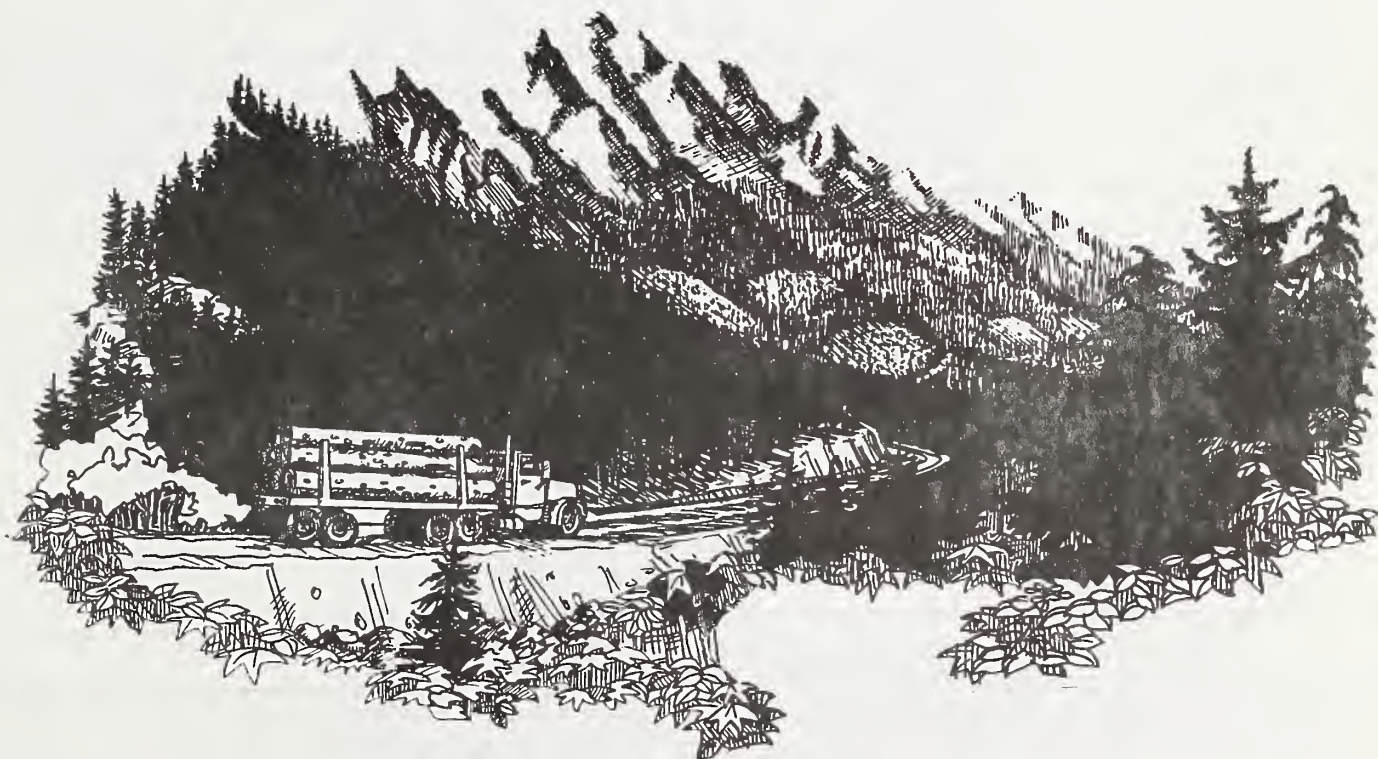
Table 8 shows average annual new road construction by alternative for the first five decades (1991-2040). Miles of new roads correspond directly to the amount of timber harvest (Table 7), which is the primary activity requiring road construction.

Table 8

**Alternative Comparisons: New Road Construction**

Alternative	Average Annual New Road Construction (miles)				
	Decade 1	Decade 2	Decade 3	Decade 4	Decade 5
A	139	137	42	48	40
B	161	159	53	56	47
C	225	227	73	85	64
D	228	235	74	80	58
P	205	207	65	76	58

The opportunities for future major transportation corridors in Southeast Alaska are discussed in the Lands and Transportation sections of the Supplement. No allocations preclude such developments under any alternative.



## Minerals

Minerals access is open under the majority of land use designations, but withdrawal from new mineral entry is a part of the Wilderness, National Monument Wilderness and non-Wilderness, Research Natural Area, Enacted Municipal Watershed, and Wild River LUD's, and some Special Areas. The Wilderness LUD group accounts for the majority of withdrawn lands. Using the acres from Table 2, Table 9 ranks the alternatives in terms of access for mineral entry.

Table 9

### Alternative Comparisons: Access for Mineral Entry<sup>1</sup>

Greatest Emphasis ← ————— → Least Emphasis				
C	D	P	B	A

<sup>1</sup> Ranking based on amount of lands open to mineral entry: areas not allocated to Wilderness, National Monument Wilderness and Non-wilderness, Research Natural Area, Enacted Municipal Watersheds, Wild River or Special Interest Area LUD's.

Areas with identified high potential for mineral development have been allocated to the Minerals land use designation variously by alternative (see Table 2). Alternative D provides the highest allocation, 338,300 acres. These allocations are made to recognize the importance of the mineral potential of these areas, but overlap with other LUD's which will be applied until such time as an operating plan is submitted for mining development.

## Roadless Areas

The majority of Tongass National Forest lands (91 percent) are in a roadless condition, and will remain so under all alternatives. The land use designations in the Wilderness and Natural Setting groups, with only minor exceptions, will all maintain roadless characteristics, and many areas within the other LUD's will also stay roadless, due to lack of access or development potential. Total roadless acres for each alternative are shown in Table 10.

Table 10

### Alternative Comparisons: Roadless Areas<sup>1</sup>

Alternatives	Roadless Areas (acres)	Percent of Forest
A	14,159,100	84%
B	13,935,100	82%
P	13,503,100	79%
C	13,301,500	78%
D	13,298,300	78%

<sup>1</sup> Ranking based on Wilderness and roadless acres remaining after 50 years.

### Local Economy

Employment in Southeast Alaska related to National Forest lands and activities is not expected to change across alternatives, except in the timber and recreation/tourism sectors. (Other sectors include commercial fishing, sport fishing and hunting, and mining.) Predicted timber employment is directly related to the timber supply. Table 11 shows timber-related, recreation-related and total employment by alternative.

Table 11

### Alternative Comparisons: Southeast Alaska Employment<sup>1</sup>

Alternatives	Total Employment	Timber Employment	Recreation/Tourism Employment
D	16,800	4,925	2,650
C	16,450	4,700	2,525
P	16,125	4,350	2,550
B	15,725	3,575	2,925
A	15,225	3,075	2,925

<sup>1</sup> Ranked by total average annual employment for decade one.

The Tongass National Forest provides 25 percent of its annual gross revenues (from timber sales, special use fees, and other revenues) to the State of Alaska. These funds are to be used for roads and schools. Gross receipts for the Tongass come almost entirely from timber sales, and are thus directly related to the timber harvest level. Based on anticipated mid-market conditions (the "average" expected market value for timber), payments during the first decade are expected to range from a high of \$21,300,000 (Alternative D) to a low of \$14,100,000 (Alternative A).

### A Difficult Choice

Much of the preceding discussion of issues can be expressed in one basic question: "What amount of timber to make available (or what amount of old growth to retain), and where?" On one side of the question are the concerns over scenic quality, recreation settings, fish and wildlife habitat (including old growth), subsistence use, roadless areas, and Wild, Scenic and Recreation Rivers. On the other side is the concern over timber-related employment, and its relationship to the economies of Southeast Alaska's communities.

The concerns expressed have been addressed, and perhaps resolved, by one or more of the alternatives. The varying success of each of the alternatives in addressing the concerns has been the focus of the preceding issue discussions.

The areas of greatest resource competition in the Tongass are the old-growth forest. Current and future timber harvest will occur in old-growth areas, at least for several more decades. Since 1954, when harvest began at significant levels, the amount of productive old growth within the Tongass has steadily declined, at a rate of about 1 1/2 percent per decade. Subsistence opportunities, scenic quality, recreation settings, and wildlife habitat are associated with the natural condition of the Forest's old growth. Continued timber harvest of almost any amount can only occur with additional reductions in old growth. (Reductions in old growth by alternative were displayed in Table 5.)



## Summary

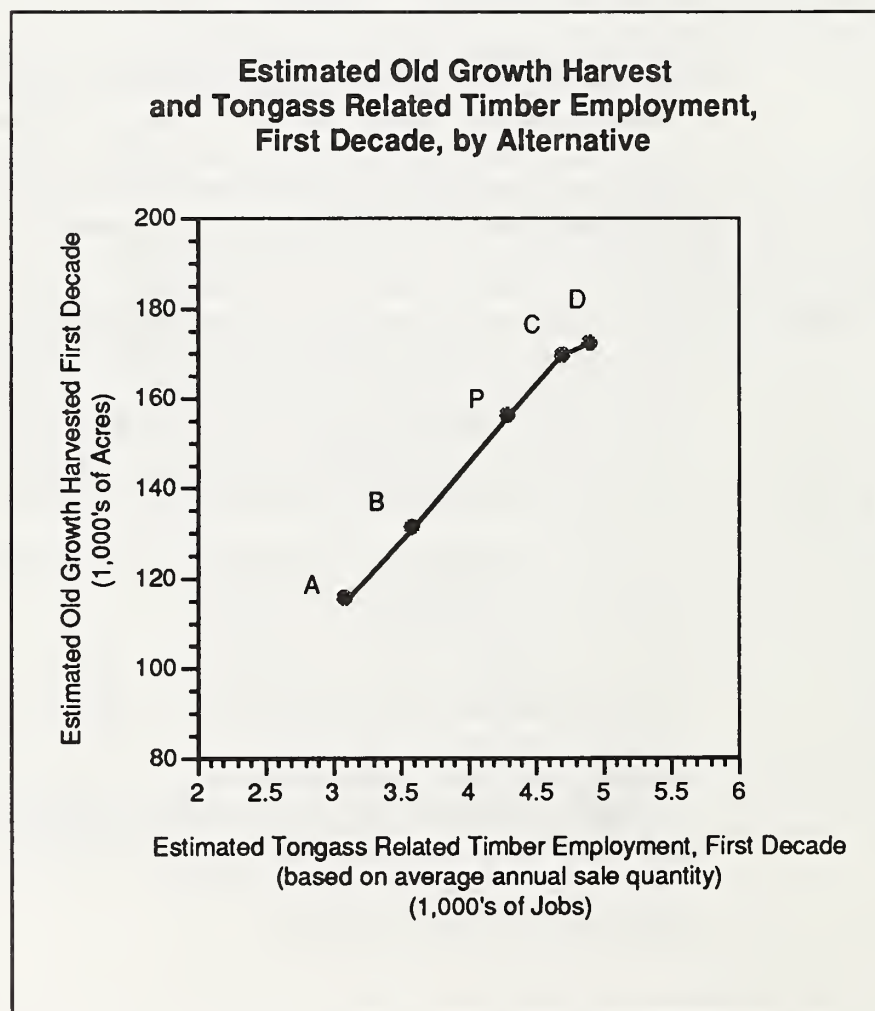
Beginning in the 1950's, development of the timber industry created a significant number of jobs for Southeast Alaskans, and has resulted in the growth or establishment of many of the area's small communities. A decline in the current level of harvest opportunities from the Tongass will mean a loss of timber-related employment, and could adversely affect some of the local communities, including, but not limited to, Wrangell, Sitka, Haines and Ketchikan.

When second-growth timber in the Forest begins to reach harvestable size, the need for old growth to sustain harvest levels will decrease. In approximately 150 years, each alternative will reach a point where no more old-growth forest need be harvested to sustain the desired timber supply. At that time, 67 percent (Alternative D) to 77 percent (Alternative A) of the 1954 amount of productive old growth will still remain: 80 to 86 percent of the total old-growth forests existing today in the Tongass.

But for the next several decades, timber harvest will be dependent on old-growth forest areas. Figure 2 shows the relationship between old growth harvest and timber employment for the next decade. On the average, one annual timber job equates to three to four acres of old growth harvested per year.

If Tongass management were to be distilled down to one difficult issue, it would be this: What is the appropriate balance between continued timber-related employment and the decline of old-growth forests?

Figure 2



## Section Three

### Your Turn

#### Your Comments

Do you have a preferred alternative? Do you like some aspects of one alternative, and some of another? What specific changes would you like to see in the alternative that most appeals to you?

To be most effective in your response, keep these few principles in mind:

- Be as specific as possible.
- Provide us with rationale for each comment.
- Refer to specific locations or areas, as applicable.

We are interested in all points of view. This effort to obtain your comments is not a vote count; you may be the only person to express a certain good idea, and your personal knowledge of an issue or area may influence a final decision.

If you commented on the 1990 DEIS, feel free to comment again on the Supplement if you wish. All comments on both documents will be used in deciding on the final Revised Forest Plan.

Send your comments to the following address:

Forest Plan Revision Team  
8465 Old Dairy Road  
Juneau, Alaska 99801

Public meetings will be held in communities throughout Southeast Alaska once the comment period officially begins. We will publicize the meetings and the beginning of the comment period widely. You may comment at a meeting or write a letter (or both): all comments we receive are weighed equally.

When the comment period officially begins, you will have at least 90 days to submit your comments. All comments should be sent to us by December 6, 1991.

#### More Information

You may wish to refer to the full set of documents while preparing your comments. Copies are available at libraries throughout Southeast Alaska, at the Forest Plan Revision Office, at all Tongass National Forest Offices in Southeast, and at all Regional Forester and Forest Supervisor Offices across the country.

If you have specific questions, or would like more information than is provided within the Summary or the Supplement, call the Forest Plan Revision Office in Juneau at (907) 586-8700.







